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United States Patent [19]**Sutardja et al.**[11] **Patent Number:** **5,805,006**[45] **Date of Patent:** **Sep. 8, 1998**[54] **CONTROLLABLE INTEGRATOR**

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Hamilton, Bermuda[21] Appl. No.: **848,549**[22] Filed: **Apr. 28, 1997**[51] Int. Cl.⁶ **G06G 7/64**[52] U.S. Cl. **327/336; 327/91**[58] Field of Search 327/336, 339,
327/344, 91, 94, 96, 563, 589[56] **References Cited****U.S. PATENT DOCUMENTS**

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6 Claims, 2 Drawing Sheets[57] **ABSTRACT**

Integrated circuitry for selectively introducing capacitance and for controlling the transconductance transfer function of one or more amplifiers includes concatenated differential amplifiers with one or more pairs of switchable capacitive components differentially connected across outputs of the differential amplifiers to facilitate operation over a wide range of operating frequencies under control of external signals.

